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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/687,297	10/13/2000	Mark Millet	CISCP136/1846	8657

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EXAMINER

RAMAN, USHA

ART UNIT PAPER NUMBER

2623

DATE MAILED: 07/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/687,297	Applicant(s) MILLET ET AL.	
	Examiner Usha Raman	Art Unit 2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 April 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20, 22-48 is/are pending in the application.
- 4a) Of the above claim(s) 22-28, 35 and 48 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20, 29-34 and 36-47 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Arguments

1. Applicant's arguments filed April 27th, 2006 have been fully considered but they are not persuasive because the claim language does not specify any location for the provisioning system with respect to the CMTS, i.e. the provisioning system maybe part of the CMTS itself, rather than a separate entity, independent of the CMTS. When the CMTS comprises a provisioning server, the CMTS can be considered the provisioning system. As a result, the rejection is maintained.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-20, 29-34, and 36-47 are rejected under 35 U.S.C. 102(b) as being anticipated by DOCSIS Radio Frequency Interface Specification (SP-RFI-I04-980724), published in July 24th, 1998.

In regards to claims 1, 29, 36, and 37, the DOCSIS Radio Frequency Interface (henceforth referred to as RFI) specification discloses in a cable modem termination system (CMTS), a method of provisioning a selected cable modem in a cable modem network having a provisioning system, comprising the steps of:

Transmitting a configuration file (parameter file) to the selected cable modem thereby allowing the selected cable modem to provision; (see figure 7-11 in page 109 – this is performed upon cable modem initialization).

Performing periodic ranging between the selected cable modem and the CMTS (see page 109);

Interrupting the periodic ranging thereby causing the selected cable modem to return to a synchronization process with cable modem network (the cable modem transmits a ranging request, and then upon a non-receipt of a ranging response after T4 time (i.e. signal loss) or upon receipt of abort ranging command, resets and reinitializes the cable modem, see fig. 7-13 in page 112, page 99 and page 115) and causing the selected cable modem to re-receive a configuration file in accordance with initialization routine. The DOCSIS RFI specification further discloses that a various servers, including a provisioning server may be located at the CMTS, or at locations other than the CMTS. See page 5. As a result, a CMTS comprising the provisioning server, is also the provisioning system; wherein when the CMTS sends an abort ranging command, it is the "provisioning system" transmitting an abort ranging command (i.e. deliberately interrupting the periodic ranging), that causes the cable modem to reset (the message transmitted by the provisioning system therefore being a modem reset command).

In regards to claims 2, 8, 30, 38, and 43, the RFI specification discloses the step of receiving a "reset" command (abort ranging sent in the RNG-RSP, causing the cable modem to reset and reinitialize) from the provisioning system associated with the cable modem network. See figure 7-13 in page 112).

In regards to claims 3, 9, 31, 39, and 44 the RFI specification discloses the step of receiving a abort ranging command at the cable modem, causing the CMTS to

interrupt the periodic ranging between the CMTS and selected cable modem and reinitialize MAC (see figure 7-13 in page 112).

In regards to claims 4, 32, 40, the abort-ranging command further causes discontinuing transmission of a ranging opportunity message to the selected modem (since the modem must go through initialization routine (see figure 7-13 in page 112 and figure 7-1 in page 98)

In regards to claims 5, 20, and 41, the RFI specification further teaches the use of SNMP commands for communication between the CMTS and CM. See page 11, section 3.1.1. and figure 3-1.

In regards to claims 6, and 19, the interrupting of periodic ranging causes a cable modem to reinitialize, thereby bypassing a power on phase.

In regards to claims 7, and 42, upon synchronizing/resynchronizing with the cable modem network, the cable modem receives a configuration file for setting its parameters. See figure 7-11, in page 109).

In regards to claims 10, 11, 33, 45, and 46, the ranging abort message is sent to the cable modem in the ranging response message, causing a RF failure in the selected cable modem. See figure 7-13 in page 112 and section 7.2.14 in page 110).

In regards to claims 12 and 16, the ranging abort command causes the cable modem to reinitialize, which causes the cable modem to resynchronize with the cable modem network for re-receipt of a UCD. See figure 7-1 in page 98 and section 7.2.2 in page 99.

In regard to claim 13, the configuration file contains data to be used to provision the selected cable modem. See page 128, 129 and section 7.2.10 pages 108-109.

In regards to claim 14, the DOCSIS RFI specification applies to DOCSIS compliant modems.

In regards to claims 15 and 47, see claims 1 and 4.

In regards to claim 17, see claims 1 and 7. During the first initialization cycle, the cable modem receives a first configuration file, and during the re-initialization the cable modem receives a second configuration file.

In regards to claim 18, the RFI specification discloses performing the re-initialization (i.e. repeating initial provisioning) after a time of T4 (further set as 30 seconds) of the cable modem not receiving a ranging opportunity message. See figure 7-13 in page 112 and page 125.

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from


the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Usha Raman whose telephone number is (571) 272-7380. The examiner can normally be reached on Mon-Fri: 9am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Kelley can be reached on (571) 272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

6. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

UR


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